

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending:

- Before this preliminary amendment: Claims 1-52.
- After this preliminary amendment: Claims 53-87.

Canceled or Withdrawn claims: 1-52.

Amended claims: none.

New claims: 53-87.

Claims 1-52 are withdrawn here in this child application, but they continue to be maintained in the parent application (with S/N 10/641,684). To avoid confusion, the numbering of the claims from the parent application is maintained here. Therefore, the new claims here start with number 53.

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Claims:

Claims 1-52¹ (withdrawn)

53. A processor-readable medium having processor-executable instructions that, when executed by a processor, performs a method comprising:

obtaining original goods;

generating a stealthy representation of a defined key;

producing a modified goods having the stealthy representation on the periphery of the original goods.

54. A medium as recited in claim 53, wherein the modified goods are an image embodied on either electronic or physical medium and the periphery, in a space domain, borders an outer edge of the original goods.

55. A medium as recited in claim 53, wherein the modified goods are a signal embodied on either electronic or physical medium and the periphery, in the time domain, precedes, follows, or both proceeds and follows the original goods.

¹ Note that claims 1-52 are only being withdrawn from the child application which is the subject of this Preliminary Amendment. Claims 1-52 are not being withdrawn from the parent application (S/N: 10/641,684).

1 56. A medium as recited in claim 53, wherein the modified goods are a
2 signal embodied on either electronic or physical medium and the periphery, in the
3 frequency domain, is within the frequencies outside a range of human perception.
4

5 57. A medium as recited in claim 53, wherein the original and modified
6 goods are selected from a group consisting of image, audio, video, software,
7 multimedia, database, and dataset.
8

9 58. A medium as recited in claim 53, wherein the generating comprises:
10 pseudo-randomly generating a defined number (p) different generator
11 matrices G_i for algebraic linear error correction codes;
12 split a defined input word (x) into p segments;
13 producing a codeword (y_i) from the input word from each segment (x_i)
14 using a pseudo-randomly formed generator matrix (G_i) of an algebraic linear block
15 code;

16 forming the stealthy representation via collecting multiple separately
17 produced codewords together, wherein each separately produced codeword is
18 generated from a segment of the input word.
19

20 59. A system comprising:
21 a processor and a memory;
22 a medium as recited in claim 53.
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2 **60.** A method comprising:
3 obtaining original goods;
4 generating a stealthy representation of a defined key;
5 producing a modified goods having the stealthy representation on the
6 periphery of the original goods.

7
8 **61.** A method as recited in claim 60, wherein the modified goods are an
9 image embodied on either electronic or physical medium and the periphery, in a
10 space domain, borders an outer edge of the original goods.

11
12 **62.** A method as recited in claim 60, wherein the modified goods are a
13 signal embodied on either electronic or physical medium and the periphery, in the
14 time domain, precedes, follows, or both proceeds and follows the original goods.

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16 **63.** A method as recited in claim 60, wherein the modified goods are a
17 signal embodied on either electronic or physical medium and the periphery, in the
18 frequency domain, is within the frequencies outside a range of human perception.

19
20 **64.** A method as recited in claim 60, wherein the original and modified
21 goods are selected from a group consisting of image, audio, video, software,
22 multimedia, database, and dataset.

1 65. A method as recited in claim 60, wherein the generating comprises:
2 pseudo-randomly generating a defined number (p) different generator
3 matrices G_i for algebraic linear error correction codes;
4 split a defined input word (x) into p segments;
5 producing a codeword (y_i) from the input word from each segment (x_i)
6 using a pseudo-randomly formed generator matrix (G_i) of an algebraic linear block
7 code;
8 forming the stealthy representation via collecting multiple separately
9 produced codewords together, wherein each separately produced codeword is
10 generated from a segment of the input word.

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2 66. An encoder system comprising:

3 an obtaining means for obtaining original goods;

4 a generating means for generating a stealthy representation of a defined
5 key;

6 a producing means for producing a modified goods having the stealthy
7 representation on the periphery of the original goods.

8
9 67. A system as recited in claim 66, wherein the modified goods are an
10 image embodied on either electronic or physical medium and the periphery, in a
11 space domain, borders an outer edge of the original goods.

12
13 68. A system as recited in claim 66, wherein the modified goods are a
14 signal embodied on either electronic or physical medium and the periphery, in the
15 time domain, precedes, follows, or both proceeds and follows the original goods.

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17 69. A system as recited in claim 66, wherein the modified goods are a
18 signal embodied on either electronic or physical medium and the periphery, in the
19 frequency domain, is within the frequencies outside a range of human perception.

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2 70. An encoder system comprising:
3
4 a good-retrieval unit configured to obtain original goods;
5 a generator configured to generate a stealthy representation of a defined
6 key;

7 a modified-goods producer configured to produce a modified goods having
8 the stealthy representation on the periphery of the original goods.

9 71. A system as recited in claim 70, wherein the modified goods are an
10 image embodied on either electronic or physical medium and the periphery, in a
11 space domain, borders an outer edge of the original goods.

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13 72. A system as recited in claim 70, wherein the modified goods are a
14 signal embodied on either electronic or physical medium and the periphery, in the
15 time domain, precedes, follows, or both proceeds and follows the original goods.

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17 73. A system as recited in claim 70, wherein the modified goods are a
18 signal embodied on either electronic or physical medium and the periphery, in the
19 frequency domain, is within the frequencies outside a range of human perception.

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2 74. A processor-readable medium having processor-executable
3 instructions that, when executed by a processor, performs a method comprising:

4 obtaining subject goods;
5 extract a stealthy representation of a defined key from a defined space,
6 time, or frequency domain of the subject goods;
7 decode the defined key from the extracted stealthy representation.
8

9 75. A medium as recited in claim 74, wherein the subject goods are an
10 image embodied on either electronic or physical medium and the space domain is
11 part of the outer edge of the subject goods.
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13 76. A medium as recited in claim 74, wherein the subject goods are a
14 signal embodied on either electronic or physical medium and the time domain is
15 towards the beginning, towards the end, or towards both of the subject goods.
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17 77. A medium as recited in claim 74, wherein the subject goods are a
18 signal embodied on either electronic or physical medium and the frequency
19 domain is outside a range of human perception.
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21 78. A medium as recited in claim 74, wherein the original and modified
22 goods are selected from a group consisting of image, audio, video, software,
23 multimedia, database, and dataset.
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1 79. A medium as recited in claim 74, wherein the extracting further
2 comprises extracting the stealthy representation from a combination of defined
3 space, time, and frequency domains of the subject goods.

4
5 80. A medium as recited in claim 74, wherein
6 obtaining a received word (z);
7 splitting the received word into segments (z_i);
8 generating a codeword for each segment by performing error correction
9 decoding for each segment using a pseudo-randomly formed generator matrix (G_i)
10 of an algebraic linear block code;

11 forming a decoder output via collecting multiple separately produced
12 codewords together.

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14 81. A goods authentication device comprising:
15 an audio and/or visual output unit;
16 a medium as recited in claim 74.

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2 **82.** A method comprising:

3 obtaining subject goods;

4 extract a stealthy representation of a defined key from a defined space,
5 time, or frequency domain of the subject goods;

6 decode the defined key from the extracted stealthy representation.
7

8 **83.** A method as recited in claim 82, wherein the subject goods are an
9 image embodied on either electronic or physical medium and the space domain is
10 part of the outer edge of the subject goods.
11

12 **84.** A method as recited in claim 82, wherein the subject goods are a
13 signal embodied on either electronic or physical medium and the time domain is
14 towards the beginning, towards the end, or towards both of the subject goods.
15

16 **85.** A method as recited in claim 82, wherein the subject goods are a
17 signal embodied on either electronic or physical medium and the frequency
18 domain is outside a range of human perception.
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20 **86.** A method as recited in claim 82, wherein the original and modified
21 goods are selected from a group consisting of image, audio, video, software,
22 multimedia, database, and dataset.
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1 87. A method as recited in claim 82, wherein the extracting further
2 comprises extracting the stealthy representation from a combination of defined
3 space, time, and frequency domains of the subject goods.
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